

ABSTRACT

[0063] A torque transmitting system supports rotational and lateral movement of a drive shaft. The system includes translating inner and outer tubes which have aligned canals for placement of a ball bearing and a pinion shaft to couple the tubes to a drive system. Rotational torque is transferred from the pinion shaft, to the outer tube and, through the ball positioned in the aligned canals, to the inner tube and then to the drive shaft. Furthermore, the ball engaged in the canals defines a range of motion in which the inner tube is slidable with respect to the outer tube, along the tubes' longitudinal axis, to permit advancement of an attached drive shaft.